



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/006,363	01/13/98	NAKAGAWA	K 47958

DIKE BRONSTEIN
ROBERT & CUSHMAN
130 WATER STREET
BOSTON MA 02109

LM02/0929

EXAMINER

NGUYEN, J

ART UNIT

PAPER NUMBER

2778

DATE MAILED:

09/29/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/006,363

Applicant(s)

Katsuya Nakagawa

Examiner

Jimmy H. Nguyen

Group Art Unit

2778



☒ Responsive to communication(s) filed on Jan 13, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1 and 2 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1 and 2 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2778

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: lines 1 and 3, "displays" should be changed to --display--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose or teach **how to determine the position of a middle position or a furthest position without the position of the general key**, which is determined later by doubling a distance from the special key to the middle point as cited in claim 2. Furthermore, for

Art Unit: 2778

given a position of a first point, how a person can determine where the middle point of two points should be without knowing a position of a second point. Therefore, this claim is rejected for the reason as set forth above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugano et al. (USPN: 5,457,454) in view of Prince (USPN: 5,581,484).

As per claim 1, Sugano discloses a virtual keyboard comprising a display 1 for displaying a keyboard, a transparent pressure sensitive panel disposed on the display and a processor (3, 7) for receiving information of positions detected and sent in a time sequence from the pressure sensitive panel when any key in the keyboard is pushed, identifying a position of the pushed key according to the received position information and outputting a code corresponding to a pushed key (figures 2A and 3, column 8, lines 34-49). Furthermore, Applicant discloses that a virtual keyboard of the present invention is similar in structure to a well-known virtual keyboard (page 4, lines 17-20).

Art Unit: 2778

However, a well-known virtual keyboard and Sugano's virtual keyboard do not teach a combination of a general key and a special key is pushed at a time to output a code corresponding to the pushed combination of the special key and the general key as cited in the claim.

Prince teaches a virtual keyboard (figures 1 and 11, column 4, lines 56-58), wherein, when a combination of several keys is pushed at a time, a code which is corresponding to a reset indication, is outputted (column 8, lines 55-59).

Prince and Sugano are analogous art because they are from the same field of endeavor, that is the computer art.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Prince's teaching with the virtual keyboard of Sugano.

The motivation for doing so would have been to reduce the number of key strokes in typing.

Therefore, it would have been obvious to combine Prince with Sugano to obtain the invention as specified in claim 1.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is (703) 306-5422. The examiner can normally be reached on Monday thru Thursday from 8:00 AM to 4:30 PM.

Art Unit: 2778

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on (703) 305-4938.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051 (for formal communications intended for entry)

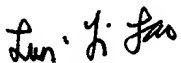
(703) 308-6606 (for informal or draft communications, please label

“Proposed” or “Draft”)

Hand delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth floor (Receptionist).

JHN

September 16, 1999


Lun-Yi Lao
Primary Examiner